

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: bcutter@teal.csn.net (Bob Cutter)
Subject: [5425] Cascade band module
Message-ID: <199511121809.LAA28855@lynx.csn.net>

I did not get many ideas to my earlier post about ways to mount the extra band module inside the case.

Here is what I did anyway. I decided the best place to mount was inside the front left (facing) of the top cover. Just be sure to clear the VFO variable. There are several places but I chose this one.

I decided to use the non-component board to mount and used small pieces of balsa to give me a support that cleared the mounting bolts. I have had problems with the adhesive used for the Velcro dots so made my own from some sew-on tyges and fastened them and the balsa with contact cement.

I took the completed Cascade to the Ham Club show-and-tell yesterday and thanks to VE4CW and W7TPM for being there and willing to answer a call, the demo was a success. Again an example that the most important person in QRP operating is the guy on the other end. This was on 20M with a Hustler mobile antenna in the parking lot. IMHO a dipole on the ground is a better QRP antenna than a Hustler mobile so I felt good about the project.

72, Bob KI0G
END

Bob Cutter,Glenwood Springs, CO

KI0G

bcutter@teal.csn.net

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: JessQRP@aol.com
Subject: [5438] Cascade Tale (long)
Message-ID: <951112205445_20472166@mail02.mail.aol.com>

Hi all,

Well the Cascade building marathin is over. Below are my thoughts, notes, votes, and complaints in not any particular order.

I received my Cascade the first week of September. I would have been on the air a lot sooner but back surgery and an extended hospital stay put the

kabosh on any kit building for quite a while.

I unpacked the kit and looked it over while doing a not real thorough inventory. My first impressions were that the board and cabinet were first rate. I still think that the packing of the components in this kit and most of the others is challenging to the builder. Having all of the loose parts thrown in one big bag is intimidating. Especially in a kit like the Cascade where there are so many parts to deal with. Of course, this is no different than most of the other major kit supplier methods of packaging. As a side note to the parts, I found that the number of missing parts in this kit was minimal. I ended up needing a few caps and resistors with no "special parts" missing. The variety of the different style of capacitors supplied made identifying the caps challenging to say the least. That combined with my middle aged failing eyesight made some of the parts identification real interesting! The overall impression was one of very good quality. One must remember that this is a club kit after all.

I liked the build a block and test it approach of the manual. It gives one a very good feeling that the radio will work when completed. Build a section, test it, build the next section and so on. Some of the instructions were not as clear as they needed to be, and that combined with cross referencing the errata messages made some of the building steps very frustrating. Patience is a virtue with this kit! I must say thanks to Doug and John and all involved at Norcal for pulling this kit off. I cannot imagine the amount of work that went into the effort. I did not work on this kit in marathon fashion. Since I was in the process of recovering from surgery, my staying power at the iron was short at best. Coils, coils, toroids and more coils! I can honestly say that I know really know how to wind coils! Somewhere around 25 in all! The toroid winding instructions were pretty darn good on some spots and pretty sketchy on others. I can say that the person building this kit should read the manual front to back to front and all of the errata from the list to make sure you know where to apply the changes. The manual that I received with my kit did have the latest changes to the kit from Doug enclosed, so I was fairly sure that I had all of the changes that I needed to proceed successfully.

I started to build and can honestly say that because I was in no hurry to get this kit done, that I had no real major snags at all in the process. Parts identification was the biggest frustration in the whole process, and that could have just been my unfamiliarity with all of the different styles of capacitors. This is one of the few rigs that I have built in this slow and very careful fashion. I am usually in too much of a hurry to get it on the air! That combined with the build a section and test method assured me a good chance that the radio would work right out of the shoot.

My impressions of the operation of the rig is good. The receiver is plenty selective and sensitive and the audio output is very strong and clear. Much better audio quantity and quality than a lot of the CW rigs that I have built. Transmitted audio quality is very good as well. I have one friend

local to me that compared the transmitted audio of the Cascade using the Radio Shack speaker mike to my main station rig which is a Kenwood TS140 and Heil head set using the HC-4 element. He much preferred the audio of the Cascade.

The rig worked the first time when completed. Receiver worked and the transmitted audio on my main station sounded very good after the initial adjustments. The adjustments on the rig are not difficult and can be accomplished without high zoot test gear. All I used was a DVM and my receiver. There are several places in the manual that they suggest that you look at the output with a scope, but since I don't have one of these, I just faked it! There are enough static checks that can be made with the DVM and that combined with the tests made with general coverage receiver I made out just fine.

The radio is now pretty much complete except for the finishing touches to the enclosure. I have made several stateside contacts on 80 meters and the reports have been favorable. I still have a small snag on 20 meters. I cannot get the power output yet over 1 watt. I have pulled the coils in the transmit filter in the 20 meter band module and re-wound them to more meet specs. As specified with 14 turns of 26 wire on the toroids, they measured about .95 uH where the spec sheet called for .72uH. I used my Autek RF-1 SWR analyzer to make this measurement and can honestly say that this meter is the best \$130.00 bucks that I have spent for test gear, but that is another story. I have checked all of the component values in the 20 meter module and the PA, but alas, the great QRP kilowatt that I am looking for on 20 has eluded me so far. From what I understand, there are others that are having problems with low power out on 20 and I am hoping that someone out there with greater skill than I possess will solve this one soon!

Overall, great radio and a great experience as this was the first sideband radio that I have built and have not operated sideband QRP much before this as I am mainly a CW op. For what the kit costs and the difficulty in building, I would recommend this kit to anyone. A word of caution here is in order though. I consider myself to be a fairly accomplished builder and do possess a fair electronic ability. This is not a beginners kit. If you have completed a couple of kits and are comfortable with winding toroids, then a little patience combined with the step by step approach manual combine to make for a very pleasurable kit building experience.

Thanks to Doug and John for their help. I had to make a couple of calls to them when I got stuck and they were very pleasant and helpful!

Best 72/73
Jess NOTFI

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Marshall Emm <75230.1405@compuserve.com>
Subject: [5428] CMOS III Hash
Message-ID: <951112203234_75230.1405_HHB30-1@CompuServe.COM>

<Ref Clay's comments>

>>I took my CMOS II unit (which accidentally happens to be in
>>a metal box) out of line and to the further most corner of the house to
>>see if it had an effect. Not scientific, but I did not detect any.

Probably I should be so unscientific and do the same, see if the hash is less. But that piece of info won't do me a lot of good. My feedline is 450 Ohm open wire so the net result is that the keyer is within three feet of the antenna! Actually the problem has become more than a nuisance, because I have found that the hash is generated during a generated pause in a message (e.g. repetetive CQ call), making it impossible to hear anything.

I might also take a piece of coax attached to the input of the receiver and use it as a probe to see if I can localize the problem. At this stage though I can say it is either the box itself (or in the box), or possibly the power lead though I did put a brute force choke on it to absolutely no effect. The only reason I haven't tried more specific remedies so far is that I will have to take it apart to replace a defective push-button which I can't buy till tomorrow at the earliest [g].

>I recall that the ARRL Handbook encouraged the use of a plastic box for
>the CMOS II construction project.

That seems odd, since the article suggested a metal box.

1. Does the CMOS II unit generate hash also?

I expect it would, given the same CPU chip. But maybe it's suppressed better, and maybe I have a defective capacitor or ineffective RF ground.

3. Does the construction notes for the III recommend an on off switch?

Not that I've seen, though I added one, and an led, and a 5v regulator. Doesn't have any relevance to the hash problem though, as the hash is generated only when the processor is working, not idle.

4. What is the power consumption of the III relative to the II?

Can't give you the relativities but can give you the measured drain for my III. Incidentally, the article said the CPU drain at idle is 10uA, but I'm not sure how relevant that is. After subtracting the current drawn by the LED, the idle current is about 2mA-- probably trasistor bias. "Key down" current is all over the shop, depending on what the CPU is doing, but peaks at 21mA.

6. If a metal box is effective to attenuate the hash, what happens to radiation along the keying leads? Do they need to be RF bypassed to ground?

It doesn't seem to be, on its own. And I tested it with NOTHING but the power lead connected, seeing no apparent difference from a full hookup.

73/72
Marshall
AA0XI/VK5FN

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: "Adam O'Donnell" <adam@philadelphia.libertynet.org>
Subject: [5440] Listserver Space?
Message-ID: <199511130343.WAA15718@philadelphia.libertynet.org>

I know that this is a little off topic, but is there any server heads here who would be able to provide space for a list dedicated to low profile hamming? My attempt at getting a newsgroup off the ground failed miserably. I am still persuing the idea of a list dedicated to the topic.

--
Adam O'Donnell, N3RCS
Amsat: N3RCS@AMSAT.ORG
Internet: ADAM@LIBERTYNET.ORG

"I want to know how God created this world. I am not interested in this or that phenomenon. I want to know His thoughts, the rest are details."

-- Albert Einstein

"Normal people worry me."

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Dale Hall <102603.30@compuserve.com>
Subject: [5442] Looking for ED, KI7KW
Message-ID: <951113050204_102603.30_HHU52-3@CompuServe.COM>

Maybe this will get to Ed. I am looking for your e-mail address.

OR,

Does anyone have Ed Burke's correct address? I used the one in the membership list but the e-mail could not be delivered.

de Dale KB0WZ

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Electronic Design Magazine <dmalinak@CLASS.ORG>
Subject: [5422] Made a NorCal Meeting!
Message-ID: <Pine.SUN.3.91.951112065625.18386A-100000@class.class.org>

Two main messages I wish to convey here:

1. A public acknowledgement of my gratitude to Dave Meacham W6EMD and the rest of the NorCal crew for their great help and encouragement in getting my Cascade up and running, and...
2. If any of you ever get to Northern California and can possibly be there over the first weekend of a given month, do yourself a favor and get to that month's NorCal meeting. You are not likely to find a better group of hams IMHO, and you are guaranteed a great QRP time. I was privileged to be able to attend last weekend's meeting and was treated to a wonderful afternoon of stories, help, advice, and fun by the entire assemblage.

I brought with me, all the way from NJ, my sick Cascade in the hopes of some advice. Dave, W6EMD, sat down with me and like magic, a DMM, wattmeter, and gel cell appeared on a table in the California Burger of NorCal meeting fame. After some probing around, some likely causes of the problem (no output in the final power-amp stage) were eliminated. Finally, Dave offered to take the rig and see if he could work it out. At the risk of imposing, I took him up on his offer. Not only did he solve the problem (open solder joint in T3), he installed a mod or two, pointed out some other items for me to work on, and, last but not least, met me at San Francisco International as I was leaving for home to deliver the working rig back into my hands! This, in my opinion, is an example of a true ham. Dave is a gentleman of the first order and I wanted to thank him publicly.

All of the NorCal crew that I met were similarly gracious and made me feel more than welcome in their midst, even though most had never made my acquaintance. My thanks to Jim Cates, Doug Hendricks, Vern Wright, Lee Stanford, Steve Cates, Bob Dyer, and many others whose names I've regrettably left out... you know who you are. I look forward to being able to join you all again sometime in the future.

One more thing...if any of you, like myself, are relatively new NorCal

members, you should look into picking up copies of the bound editions of the first two volumes (1993 and 1994) of QRPP. They're well worth the combined \$25 price and would be a valuable addition to your QRP library. They made my 5-1/2-hour flight home go VERY quickly! Contact Doug Hendricks for more information.

72 David N2SMH
Glen Rock, NJ

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [5431] NorCal 40a F/S
Message-ID: <199511122228.WAA18450@chuck.dallas.sgi.com>

Gang,

Didn't think it would ever happen but here it is.

For Sale: One unassembled NorCal 40a kit complete as shipped from NorCal Club. It is unopened. This is a kit from the second batch sold by NorCal and that was packed by OHR.

If you want it assembled, I'll be glad to do a first rate job on it. You do the paint and lettering.

\$100 firm. This was to be a collectors item, but I have some other kits that I want to assemble and no use keeping this one outta circulation.

First email that wants it gets first choice. Will ship Priority Mail in padded envelope that NorCal used and USPO box for Priority Mail.

See email address below. I'll queue up first five requests until deal is done.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Dave Hockaday <wb4iuy@nando.net>
Subject: [5424] Nov ss qrp results
Message-ID: <9511121608.AA29294@merlin.nando.net>

Oh well... I finally got around to posting my contest results for the SS test last weekend.

My station was a Yaesu FT-901 at 4.5 watts output into a direction selectable dipole array at 95 feet. Feedline is Flexi-4x1, about 150' of it. Bencher paddles and MFJ piggyback keyer. I operated only on 40 meters, and very seriously. Most contact were between playing on the net, doing household chores, and working on a rig in my shop...not exactly a heavy tester, heehee.

Contacts = 41
Sections = 36
Number of "Q" qrp to qrp contacts = 2
Hours of operation = approx. 3

Qrp stations worked = KG5U, K9AY

Total points = 2952

Percentage of stations worked with a check higher than 80 = 17% (just info for the earlier thread about that)

I had a blast. I am really having a good time tinkering around with QRP, after a 16 year break from qrp and working only QRO, heehee. Most everyone I called in the contest answered...I just wasn't on a lot...

73 de Dave WB4IUY

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: K5ERJ@aol.com
Subject: [5434] Parts Scavenging
Message-ID: <951112183136_104671746@emout05.mail.aol.com>

Group:

Since I became active in QRP.. I have been building up the junk box in anticipation of some upcoming projects. I've rendered no mercy on the garage sale radios, vcr's , TV's and other various and sundry items found by my XYL at the usual weekend sales.

Now the delimma! There are many parts which I don't recognize for what they may actually be. Caps and Resistors no problem but things like chokes, coils, IC's etc are going to be a problem.

Is there a publication out there that helps identify these kind of parts?

Would like to hear from anyone who uses the same method of adding scrap box inventory.

72

Ed K5ERJ (Kansas)

From qrp-l@lehigh.edu Mon Nov 13 14:42:00 1995
From: "Robert J. Gobrick" <rgobrick@public.compusult.nf.ca>
Subject: [5435] QRP Month In Review
Message-ID: <199511130132.WAA06207@public.compusult.nf.ca>

QRP-L Gang,

I have the luxury (?) of picking up a month's worth of mail every month (?) and this affords me to see everything written about QRP for that month.

I just thought I'd point out a couple of tidbits that everyone may have not had a chance to see (go find a QRP friend to run down these tidbits..). So here's what happening this month in QRP publications:

1. New England QRP Club 10/95 "72" Newsletter - a) Introduction of Dave Benson's NN1G "The Green Mountain-20 Transceiver" - a hot new revolutionary and patriotic \$75 transceiver using an MMIC. b) two great articles by our Joe N2CX on Hamfesting (most funny and revealing article to date on how to "bargain" for a bargain) and NN1G Rig Modes - Homebrewing 90's Style. c) QRP-L Supreme Expert LB W4RNL on A few Notes on Vacuum Tube Nostalgia and many more articles found nowhere else but in 72.

2. Colorado QRP Club No. 10 "Low Down" Newsletter - a) Paul NA5N Part 2 continuing series on QRP Rigs - Circuit Analysis (boy I hope Paul contributes a QRP ARCI "Four Days in May (c)" Symposium paper on this great series - I learn more about our little NE-602 rigs from his great series of articles). b) A Marshall AA0XI review on the infamous (?) Ramsey QRP-30 c) lots of neat articles on biking QRP, cw operating, field day etc.

3. The NorthWest QRP Club 10/95 "NWQ Newsletter" - a) Big news here is that Roy W6EMT plans to release his famous NW80/20 kit (a 5 watt the best of all designs NE602 rig) in Dec 1995 for \$75 - stay tuned for details. b) Nice Mountaineering QRP Article by Dennis K1LGQ - the editor of the NE QRP 72 newsletter - boy these clubs are getting ecumenical!! c) QRP Mobiling and a

OHR 400 review.

4. 73 Magazine - Bryce WB8VGE QRP column reviews the Small Wonder Labs RIT kit (with the "backwards RIT switch - see the 72 GM-20 article above).

5. Worldradio QRP column by Rich KI6SN - a) 11/95 issue has a the typical "KI6SN excellent" review of the Wilderness 40a transceiver. By the way the Oct issue had a write-up and photo of Norcal's next project - the St. Louis Tuner".

6. MFJ 90's Newsletter - Rich KI6SN mentioned in his last column that the Joe Falcone AA8HV has dropped publication of the MFJ 90's Newsletter that he started. The newsletter was a great source of MFJ 90xx rig modifications, mods etc and I sure do miss it. But to the rescue I received in the mail a "new" MFJ 90's newsletter taken over by Dave AB5JE. Please drop Dave an email at 73150.301@compuserve.com or Dave Luscombe AB5JE, PO Box 393, Lake Dallas, TX 75065 to encourage him on. I think the MFJ rigs that Dave Littlefield designed back in the late 80's have revolutionized QRP and MFJ helped that along with this very attractively priced rig. It needs a newsletter!

7. Hambrew Autumn 95 - Stan K4DRD reviews the Wilderness KC-1 counter and shows the "first" published picture of this tiny unit - looks marvelous - I have two on order. Other good articles by Bill K5BDZ and the Tejas QRP dummy load, photos & write-up on the yet-to-be released "new" W6EMT NW80/20 Xcvr, review of the Kanga 6m CW transmitter and Ten Tec 6m receiver using a Neophyte as "tail end" and finally the kick-off of a dedicated 6 meter column - Deep Six by Fred Bonavita W5QJM.

8. CQ Magazine has a detailed article by Mac KI6BP on a "Novice" 15 meter Band QRP Transceiver using a bunch of NE-602's with 4 separate oscillator circuits. Some interesting construction ideas, but certainly not a rig for a "Novice" to build - no pc boards.

9. QST - follows up of an article by Rick Campbell KK7B on packaging his R2 receiver as a 20 meter high performance CW transceiver.

10. G-QRP Club SPRAT Autumn 95. Another issue jammed packed with qrp circuits - even a "mouse" iambic paddle. Not to be missed.

So that's it for this mail run - awaiting the next issues of QRP Quarterly and the Norcal QRPp - never a dull moment in QRP literature.

73/72 Bob Gobrick V01DRB/WA6ERB

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| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |  
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |  
| Internet:      rgobrick@public.compusult.nf.ca |  
|                bgobrick@terra.nlnet.nf.ca |  
| Compuserve:   70466.1405@compuserve.com |  
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From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: scott.thomas@circellar.com
Subject: [5426] Remote Control Power Modules
Message-ID: <9511121435.0KHPN01@circellar.com>

I'm looking for comments or experiences with Radio Shack's "Plug and Power" and Stanley's "Lightmaker" transmit and receive modules. Do these cause any interference on our HF bands? Do our radios cause any interference/false triggering of the modules? Are Stanley's and RS's modules interchangeable?

Thanks in advance,
Scott,
Scott.Thomas@circellar.com

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Marshall Emm <75230.1405@compuserve.com>
Subject: [5429] Signing QRP
Message-ID: <951112203238_75230.1405_HHB30-2@CompuServe.COM>

[ref Kris's comments]

>> One standard could be to leave off the QRP -- it just takes more
>> time in an exchange. Of course when preheating the ionosphere no
>> harm in calling CQ QRP or dragging out the call sign with \QRP. Ditto
>> when you think that the dangling \QRP will make folks try harder.

OTOH, it can really work against you. It's scary how often a QRO op and his \$5K station will go deaf when he hears those three little letters generated by your \$20 worth of equipment.

Myself, I mostly only use it (or QRPP) when working in "known" QRP areas.

73/72
Marshall
AA0XI/VK5FN

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: wwm@wa8tzg.mi.org (Bill Meahan)
Subject: [5433] The R2 and DSP
Message-ID: <30a67385.wa8tzg@wa8tzg.mi.org>

Let's see if we can get a thread going that has nothing to do with
foxes or sweepstakes :-)

In KK7B's original article on the R2, Rick suggests using the basic R2
approach with a DSP unit instead of the analog filters/audio phase
shifters used in the R2 itself. Has anybody on the the list actually
tried this (or knows for certain someone has)? What DSP system was
used? With what results?

I only know enough about DSP, per se, to ask some pretty dumb questions
(although I spent years developing real-time, event-driven control
systems for industrial test equipment) but I'm intrigued enough by the
possibility to want to pursue the concept further.

BTW To my mind, this is a far better use of computing in radio than all
the "feeping creaturism" of the typical Yacomwood. I'd really rather
have a GOOD RECEIVER and an old fashioned hand-calibrated analog dial
than a mediocre receiver with a front panel that plays Doom. End of
editorial.

Some additional ideas: Using SL6440's instead of DBMs for a better
noise figure and a small bit of gain rather at the cost of a *slight*
loss in IP3. Using a Hands "6-band pre-mix" unit to generate the
operating frequencies.

Discussion??

(ObPun: Since this would be a Digital, second-generation R2 would this
make it an R2D2???)

--

Bill Meahan WA8TZG wmeahan@wa8tzg.mi.org
Member of: ARRL, IMRA, NorCal QRP (#407), G-QRP (#8468), MI-QRP (#M1458)
Hey, this is my OWN computer! I can say what I want!
cat: a purr bearing mammal

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [5439] Re: Cascade Tale (long)
Message-ID: <Pine.LNX.3.91.951112192342.27926A-100000@dt1.datatamers.com>

Jess,

Re your low output on 20:

I have had the same problem with two rigs so far (too much inductance in the band-module inductors). I had to take off 2 turns on L2, L3, L4, and L5 to get the correct amount of inductance for each one. Either the cores have very-high perm or the winding table is wrong. With the correct inductances the TX filter caps should tune at about half mesh. I have encountered a false tuning point near minimum mesh. With everything working right you should get 5W output.

72, Dave, W6EMD

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Craig LaBarge <74740.3166@compuserve.com>
Subject: [5423] Re: email ss logs
Message-ID: <951112160059_74740.3166_EHB137-1@CompuServe.COM>

Russ, AB7JX wrote:

>QRO people have antenna farms, QRP people have antenna gardens :-)

Given my limited QTH, I think what I have here is more like an antenna flower pot. :-)

73, Craig WB3GCK

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: wwm@wa8tzg.mi.org (Bill Meahan)
Subject: [5432] Re: LM 301 ????
Message-ID: <30a66fd1.wa8tzg@wa8tzg.mi.org>

lewise@bga.com writes:

>Recently there was a discussion of a circuit from the new ARRL handbook

>that used the LM301 as an element. I believe it was Chuck that mentioned
>that this was difficult to obtain.
>
>Someone else mentioned that the LM301 was an obsolete device.
>
>At the time I wondered why the new handbook would be using a device
>that old... but hey! Look at all the old devices still being used... :-)
>
>Anyway today I was boning up on fets and stuff in the 1994 ARRL handbook
>and was skimming across the section on subsystem LICs, and my eyes came
>to rest on this circuit describing a wide-band small signal amp...
>
>As I am staring at the page, I notice the device is an LM3011....
>Hmmmmm You don't suppose that the LM301 mentioned on the list was really
>supposed to be an LM3011 do you?????
>

Sorry, but you're getting two threads confused.

1. The 1995/6 Handbook project related to an LM703 which is an old part National acquired when it bought Fairchild a few years back. Silly me, I posted that a '703 was an op-amp. Nope - a wideband RF/IF amplifier. Word is that this one is definitely obsolete but still available from some distributors/second sources (like NTE).

2. The LM301 is used in the "15 Meter Novice Band QRP Transceiver" in the November 1995 CQ Magazine. This baby is DEFINITELY an op amp! I'm intimately familiar with this puppy 'cause a major control circuit I used to have to support at work had dozens of these critters in them. The CQ project uses LM301's - no mistake. The 101/201/301 is one of the finest low-frequency op amps ever designed - much lower noise than a '741 and better power handling capacity to boot. Only "problem" was that it was a National proprietary part, not made by a bazillion sources as was the '741. The '301 *may* be obsolete, but given its popularity and the fact that many newer designs offer little improvement (given the correct problem space) I'd doubt it.

3. The LM3011 is/was National's "second source" to the RCA CA3011 - a wideband LIMITING amplifier aimed at FM/TV applications. Different pin-out, different use. '3011's were never that popular so *they* may well be obsolete.

And in case anybody cares, for National parts, the difference between a 101 a 201 and a 301 is the temperature range with a 101 being spec'ed for a military range (-55 to +125 C), a 201 being a "high-spec" commercial temp range (-25 to + 85 C) and the 301 being for garden-variety temps (0 to +70 C). Same applies to other 1XX/2XX/3XX series devices

--

Bill Meahan WA8TZG wmeahan@wa8tzg.mi.org
Member of: ARRL, IMRA, NorCal QRP (#407), G-QRP (#8468), MI-QRP (#M1458)
Hey, this is my OWN computer! I can say what I want!
cat: a purr bearing mammal

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: lewise@bga.com
Subject: [5441] Re: LM 301 ????
Message-ID: <9511131144.AA0068@localhost>

Bill:

Thanks for straightening me out on that.....

Must have been later than I thought....

- - - -

Larry E. Wise KA5T lewise@bga.com
206 Sinuso Drive 512-863-5870
Georgetown, Texas 78628-1520

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Charlos Potma <Charlos.Potma@rivm.nl>
Subject: [5443] Re: Meeting Wayne in Amsterdam
Message-ID: <199511131022.FAA120199@nss2.CC.Lehigh.EDU>

..well, I know this is a teaser but:
Wayne had some rather exciting ideas about tuners which he
was prepared to discuss, provided we kept them secret for
a while...

charlos potma, PA3CKR,
charlos@rivm.nl

>

> Charlos,

>

>.....

> By the way - curious about your statement " Wayne and Mike entered into a
> debate concerning various antenna tuner circuits but soon came to the usual
> QRP conclusion that things could be done better >and< simpler yet..." So
> what new ideas did Wayne and Mike discuss..

>
> Caio 73/72 Bob V01DRB/WA6ERB
>

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: Dale Hall <102603.30@compuserve.com>
Subject: [5427] Re: QRP QSO Format, III
Message-ID: <951112200433_102603.30_HHU56-1@CompuServe.COM>

Why so many negative comments regarding a format for QRP QSOs? Seems like a reasonable idea to me, Marshall. The first things I want to know in a QSO is QTH, RST and name. After those are taken care of, we can talk about anything we want to talk about.

I can't tell you how many times I have heard rotten band condx (especially on QRP) in which I did not copy something the other station said. The QSO goes something like this:

ME > TNX RST 339 339 BT QTH KANSAS CITY MO BT NAME DALE DALE HW? BK
HIM > BK TNX DALE RST 459 459 BT QTH __LL__ OR BT NAME PAUL PAUL HW? BK ME >
BK OK PAUL QSB QSB BT PLS RPT QTH QTH? BK
HIM > BK OK DALE QTH IS D_L__S OR D__AS OR BK
ME > BK QSB QSB BAD BT RPT QTH QTH BT
HIM > BK OK DALE BT QTH IS DALLAS OR DALLAS OR BK

Ok. I finally get the report. But, the scenario might just as well repeat as the band gets worse.

POSSIBLE SOLUTION TO THE PROBLEM A FORMAT.

I have already told him that there is QSB. The band is going up when he sends the things I already know and down when he sends things I need to know. So, if there is an agreed-upon format, we might have the same QSO thus:

ME >TNX RST 339 339 BT QTH KANSAS CITY MO BT NAME DALE DALE HW? BK
HIM >BK TNX DALE RST 459 459 BT QTH __LL__ OR BT NAME PAUL PAUL HW? BK
ME >BK OK PAUL QSB QSB BT PLS RPT QTH QTH? BK
HIM >BK DALLAS DALLAS DALLAS OR OR OR BK
ME >BK TNX PAUL

Then we go on with the QSO. He only repeats what was missed; nothing else. And this would be repeated any number of times as necessary until the info was received or the band drops out. But only if we have some kind of agreed-upon format, at least at the beginning of a QRP QSO.

Just a thought on a problem that seems to plague all QRP QSOs, at one time or another.

de Dale KB0WZ

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [5430] Re: Signing QRP
Message-ID: <199511122222.WAA18440@chuck.dallas.sgi.com>

Gang,

I have been using K5F0/QRP on all my CQs for the past three years. I have not once had a problem with a QRO station that I have called abruptly closing the QSO due to my being QRP. Now I have had QSOs end when conditions went down the tubes, but I knew it was coming in most cases.

I was at the NTCC (North Texas Contest Club) meeting Tuesday night. This was my first meeting with the group. A talk was given comparing the Omni VI, FT1000MP, IC775DSP, and the TS870S as contest rigs and rigs in general. With MDS values values of -141 to -144dbm, if they can't hear you then some ham with a NC40a or other homebrew or most other commercial rigs are not going to hear you either. It's a fact of life. These rigs can hear just about anything at noise floor levels.

Stations that are running the high dollar rigs with high dollar antennas will work you. Don't put them in a class of stations that you don't want to try to talk to. Even with QRPers sometimes you are going to run across hams that don't want to carry on a long QSO. Fine. So be it. Just enjoy the ones that make you happy. There's room for everyone. You gotta turn over a lot of rocks in a field to find the gems.

I think my average QSO is about 15 minutes. At 20wpm that is 300 words. With all the shortcuts and shorthand notations, you can say a lot in 15 minutes or less.

If you are having trouble with having short QSOs with stations, then start looking for the causes other than the station(s) you encounter. Have someone record

your signal off the air. Would you talk to it?

dit dit

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Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-l@lehigh.edu Mon Nov 13 14:42:00 1995
From: "Robert J. Gobrick" <rgobrick@public.compuser.com>
Subject: [5436] Re: The R2 and DSP
Message-ID: <199511130132.WAA06204@public.compuser.com>

Bill and QRP-L Gang,

The last circuit using the SL 6440 was a 80 meter Transceiver Using Surface Mount Components by Paul Kranz W1CFI (New England QRP Club) in the QRP ARCI QQ January 1994.

Because it was a SMD project I shied away from it.

I keep hearing about the SL6440 family of devices - what do you gain using it over a DBM and how much better is this Plessey unit over the NE-602?

Also does anyone know some SL6440 projects/designs/kits out there? Hands of UK?

73/72 Bob V01DRB/WA6ERB

At 17:37 11/12/95 EST, you wrote:

>

>Some additional ideas: Using SL6440's instead of DBMs for a better
>noise figure and a small bit of gain rather at the cost of a *slight*
>loss in IP3. Using a Hands "6-band pre-mix" unit to generate the
>operating frequencies.

>

>Discussion??

>--

>Bill Meahan WA8TZG wmeahan@wa8tzg.mi.org

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| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet: rgobrick@public.compuser.com |
| bgobrick@terra.nlnet.nf.ca |
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Compuserve: 70466.1405@compuserve.com

From qrp-1@lehigh.edu Mon Nov 13 14:42:00 1995
From: "Bill Kelsey - N8ET - Kanga US" <kanga@brutus.bright.net>
Subject: [5437] Re: The R2 and DSP
Message-ID: <199511130100.UAA26117@brutus.bright.net>

When I first began handling the R1/R2/T2/miniR2 for KK7B, I asked him about the possible use of the rigs with digital signals and with DSP. His response was that he knew it could be done, but had not found anyone who could really explain HOW to do it.

If there is anyone on the list who can or has done some DSP work with the I and Q outputs from the R2 or similar rig, I would like to hear about it also!

Regarding the use of the Hands electronics 6 band premix unit - it would work, but would need an amplifier to make it work with the SBL-1 series of dbm's. The Hands unit is set up to drive a mixer of the 6440 type which requires much less drive. Which makes your idea of 6440's instead of SBL-1's sound very good....

The only other thing you would need would be the phase shift network for the 6 different bands.

The downside is that somewhere this past summer I heard that Plessy is going to get out of the business of manufacturing discrete IC's - like the 6440. The supply may become more limited than it is now.

Starting another thread along the KK7B lines - I built up one of the 20 cw xcvs that Rick published in the most recent QST. Very nice! There are a couple of mistakes in the schematic that was published with the article. I am going to compile a list, and will publish it here if there is any interest.

I used the ugly construction method, and found it quite easy to do - biggest problem I am finding now is that it was so easy to squeeze the parts in tightly, that now it is going to be tough to change anything! I made it on a board the same size as a miniR2, and had a lot of space left over.

Has anyone else built one of them up??

73 - Bill Kelsey - N8ET
Kanga US
kanga@bright.net
419-423-4604
<http://qrp.cc.nd.edu/kanga/>